

Explanation of Amendments in the Claims:

1.(withdrawn) A tape for application onto a surface of an absorbent material to be monitored for detecting moisture in the absorbent material, the tape comprising:

    a substrate of dielectric, hydrophobic material with a bottom surface of the substrate arranged for application onto the surface of the absorbent material to be monitored;

    first and second elongate, parallel, spaced apart conductors secured to a top surface of the substrate;

    a protective layer of non-hygroscopic, water pervious, dielectric material secured to the to the top surface of the substrate and extending over the conductors; and

    a mounting adhesive on a bottom surface of the substrate for attachment of the substrate to the surface of the absorbent material;

    the mounting adhesive being protected from adhering to other objects before being applied to the surface.

2.(previously cancelled)

3.(previously cancelled)

4.(withdrawn) A sensor according to Claim 1 wherein the mounting adhesive is protected by a release sheet over the mounting adhesive.

5.(withdrawn) A tape according to Claim 1 wherein each of the conductors is a flat metal strip at least 6.5 mm wide.

6.(withdrawn) A tape according to Claim 1 wherein the conductors

are spaced apart by a distance of at least 13 mm.

7.(withdrawn) A tape according to Claim 6 wherein the conductors are spaced apart by substantially 13.6 mm.

8.(withdrawn) A tape according to Claim 1 including a plurality of pairs of moisture probes adapted to penetrate the protective layer, the respective conductors and the substrate and to extend into a material to which the substrate has been adhered, each probe being a conductive element of corrosion resistant material.

9.(withdrawn) An apparatus comprising a tape according to Claim 1 and further including a sensor unit for applying a voltage across the two conductors and monitoring currents passing between the conductors so as to detect changes in resistance between the conductors caused by moisture in the material.

10.(previously cancelled)

11.(previously cancelled)

12.(previously amended) A method of detecting moisture in an absorbent material, the method comprising:

providing a tape formed by a substrate of a dielectric, hydrophobic material, a layer of a mounting adhesive on a bottom surface of the substrate and a first and a second spaced apart elongate parallel conductors mounted on a top surface of the substrate and extending therealong;

attaching the tape by the adhesive on to a surface of the material so as to mount the two conductors on or adjacent the surface of the material;

penetrating the first and second conductors of the tape with a respective one of a pair of conductive probes such that each of the conductive probes engages

into the absorbent material and is electrically connected to the respective conductor;  
applying a voltage across the two conductors; and  
monitoring currents passing between the conductors so as to detect  
changes in resistance between the conductors caused by moisture in the material.

13.(previously amended) A method according to claim 12 wherein the conductors of the tape are covered by a protective layer of non-hygroscopic, water pervious, dielectric material secured to the top surface of the substrate and extending over the conductors.

14.(previously cancelled)

15.(previously amended) A method according to claim 12 wherein each of the conductors is a flat metal strip at least 6.5 mm wide.

16.(previously amended) A method according to claim 12 wherein the conductors are spaced apart by a distance of at least 13 mm.

17.(previously cancelled)

18.(previously amended) A method according to claim 12 wherein each probe is a rigid elongate conductive element of corrosion resistant material which is forced into the material longitudinally of the element.

19.(previously amended) A method according to claim 12 wherein the absorbent material is a moisture permeable element of a building construction.

20.(previously amended) A method according to claim 19 including providing a plurality of pairs of conductive probes, locating each pair at respective spaced locations along the length of the tape and penetrating each pair into the absorbent material through the respective conductors at the location.

21.(previously added) A method of detecting moisture in an absorbent material, the method comprising:

providing a tape formed by a substrate of dielectric, hydrophobic material, a layer of a mounting adhesive on a bottom surface of the substrate and a first and a second spaced apart, elongate, parallel conductors mounted on a top surface of the substrate and extending therealong;

attaching the tape by the adhesive on to a surface of the material so as to mount the two conductors on or adjacent the surface of the material;

penetrating into the absorbent material through a surface of the material a plurality of pairs of conductive probes;

the probes of each pair being spaced apart such that current can flow through the material between the probes when moisture is present in the material;

the probes being located at spaced positions along a length of the material to be monitored;

electrically connecting one probe of each pair to the first one of the conductors;

electrically connecting a second probe of each pair to the second one of the conductors;

applying a voltage across the first and second conductors; and

monitoring currents passing between the conductors so as to detect changes in resistance between the conductors caused by moisture in the material.

22.(previously added) A method according to Claim 20 wherein the first and second conductors of the tape are covered by a protective layer of non-

hygroscopic, water pervious, dielectric material secured to the top surface of the substrate and extending over the conductors.

23.(previously added) A method according to Claim 20 wherein each of the first and second conductors is a flat metal strip at least 6.5 mm wide.

24.(previously added) A method according to Claim 20 wherein the first and second conductors are spaced apart by a distance of at least 13 mm.

25.(previously added) A method according to Claim 20 wherein each probe is a rigid elongate conductive element of corrosion resistant material which is forced into the material longitudinally of the element.

26.(previously added) A method according to Claim 20 wherein the absorbent material is a moisture permeable element of a building construction.